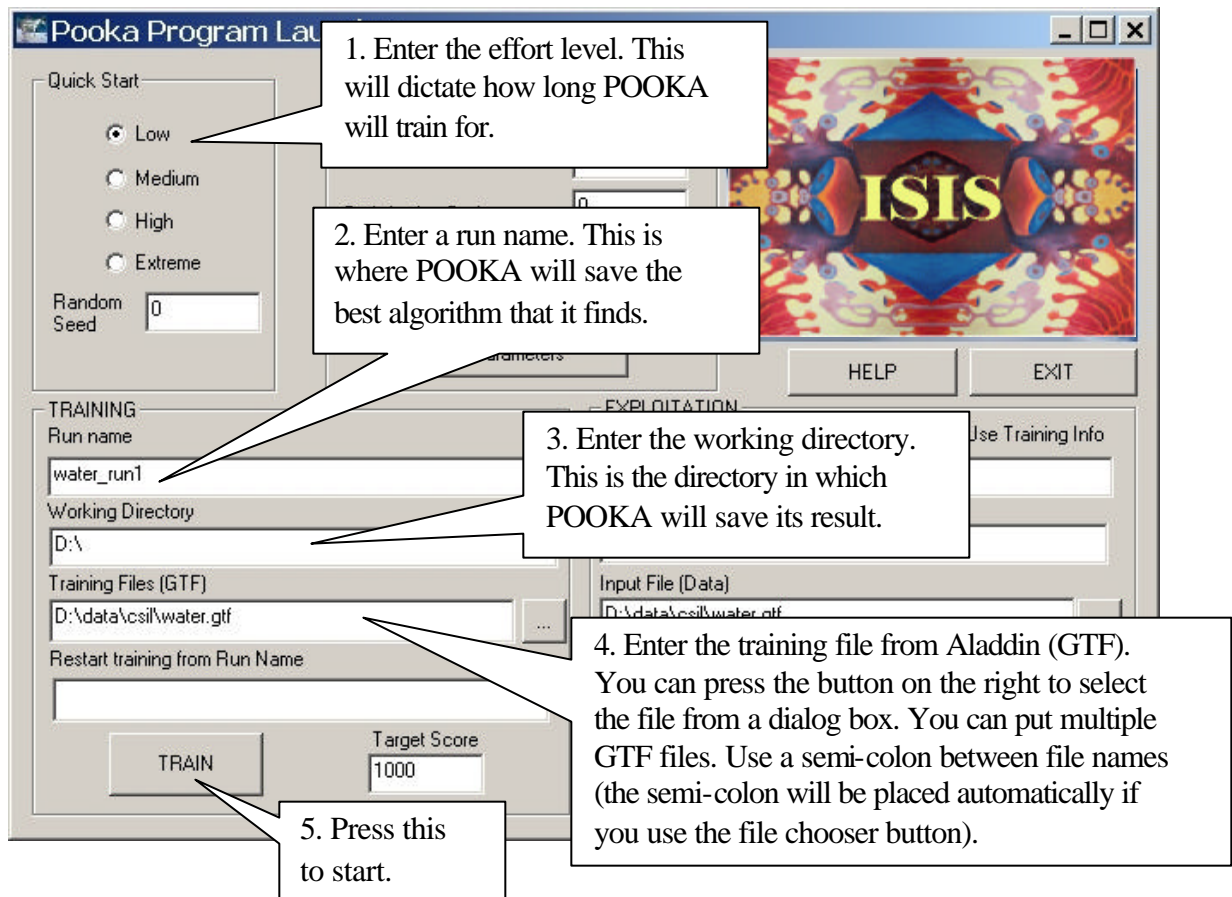


POOKA Help and Extra Info

Basic Usage

Step 1: Training

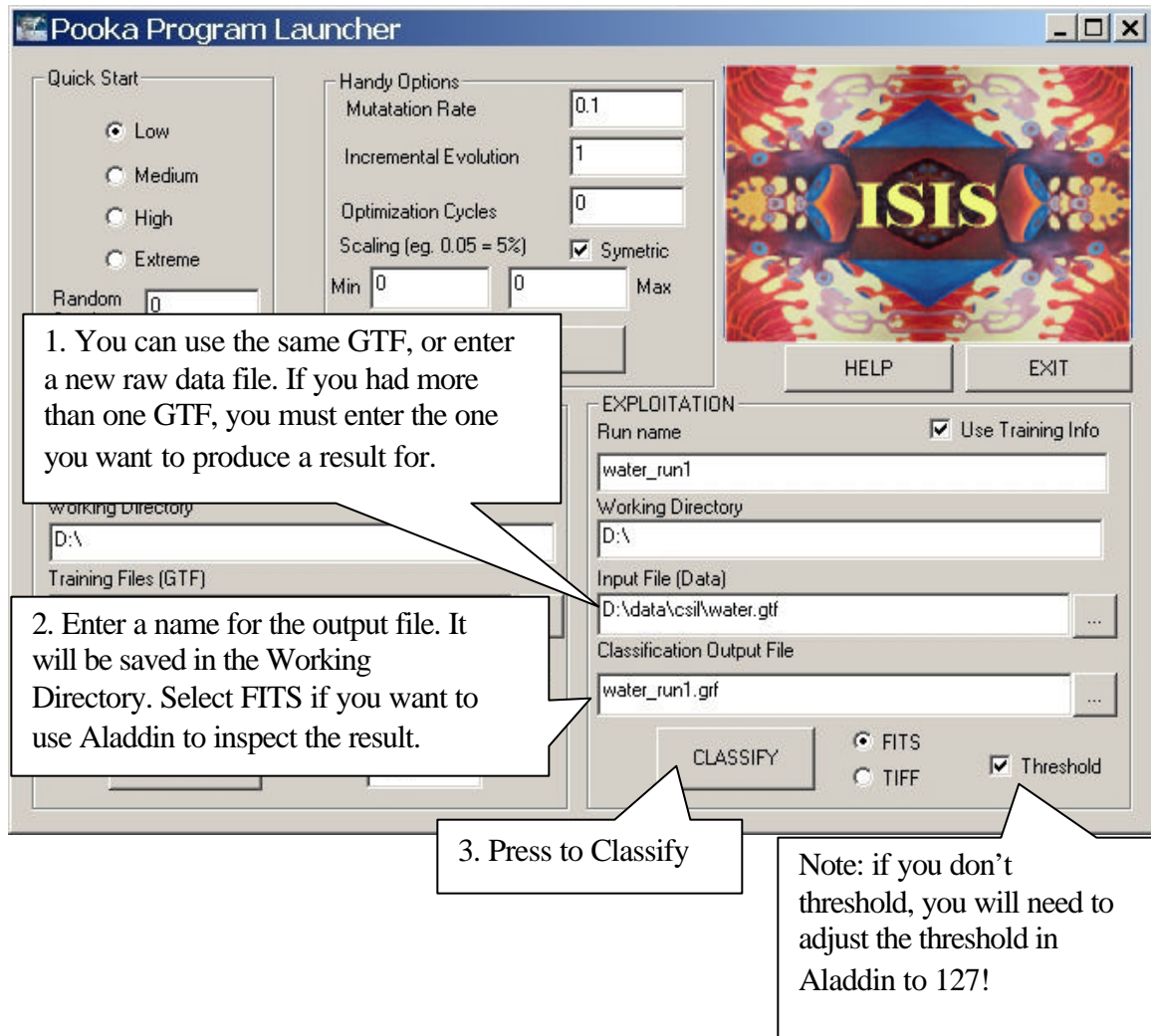
Once you have produced a training file with Aladdin, you are ready to train POOKA.



POOKA will bring up a window and you will see lots of numbers. Once this is done you are ready to inspect the result.

Step 2: Inspecting the result on the training image

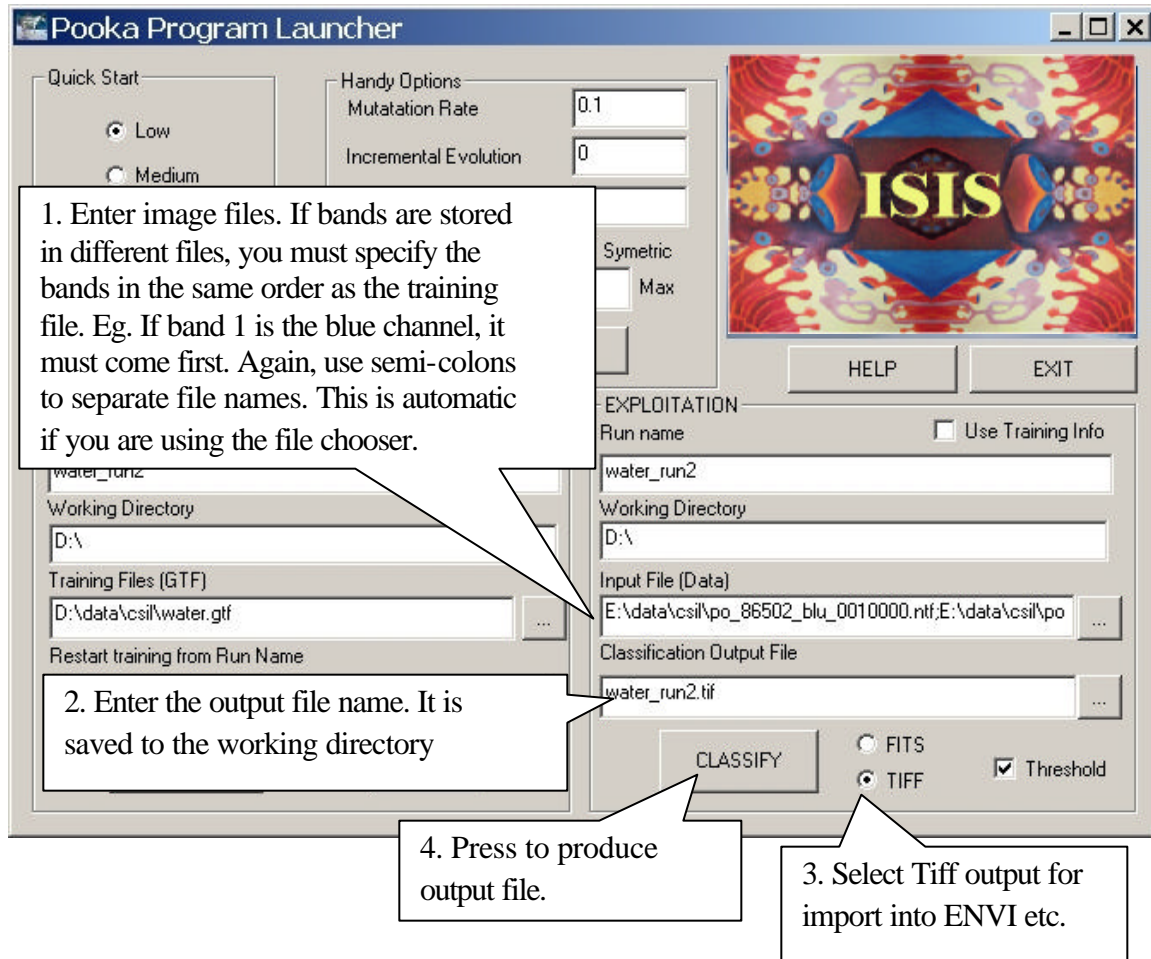
An algorithm has been found. It is saved in the working directory, with the run name you supplied. You now probably want to inspect the result.



Once you are happy with the result in Aladdin, you are ready to apply POOKA to the larger image.

Step 3: Application to larger images

Now you want to apply POOKA to a much large image.

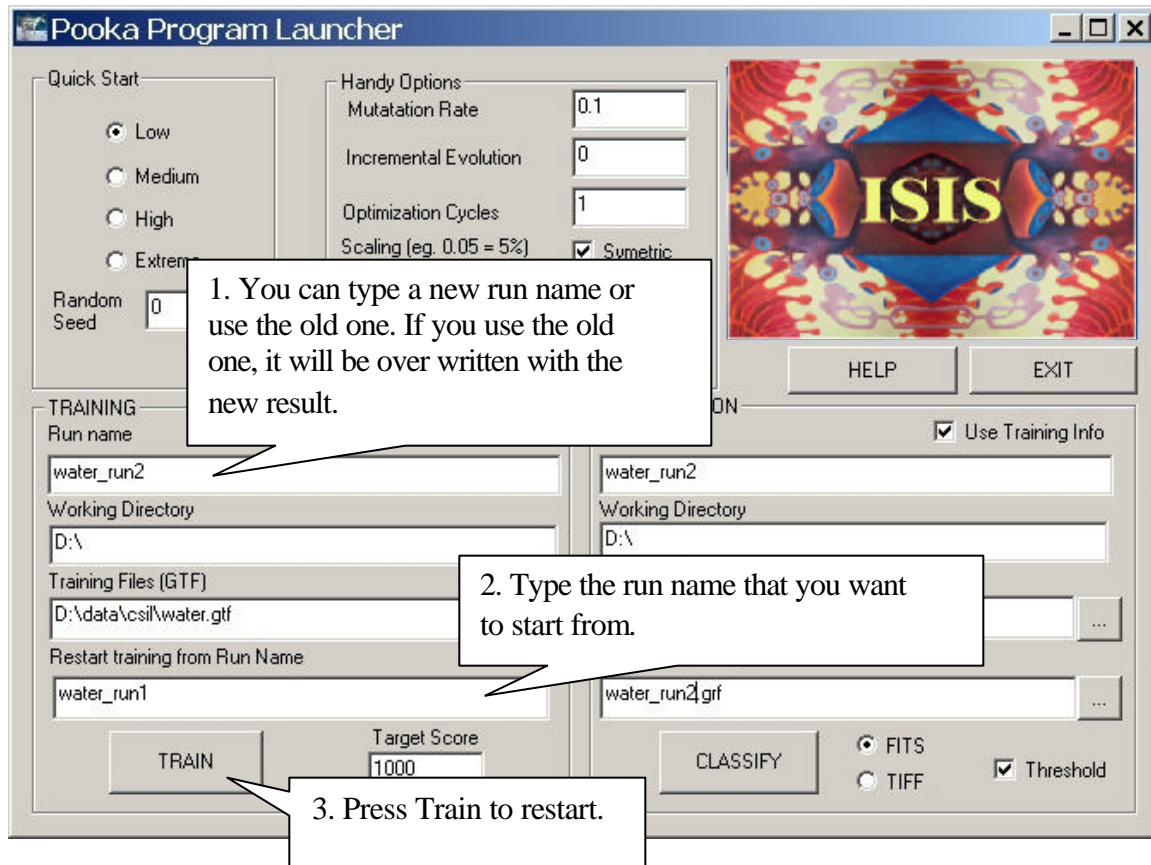


The basic work flow has been described. Some of the more useful options will now be described.

Useful Options

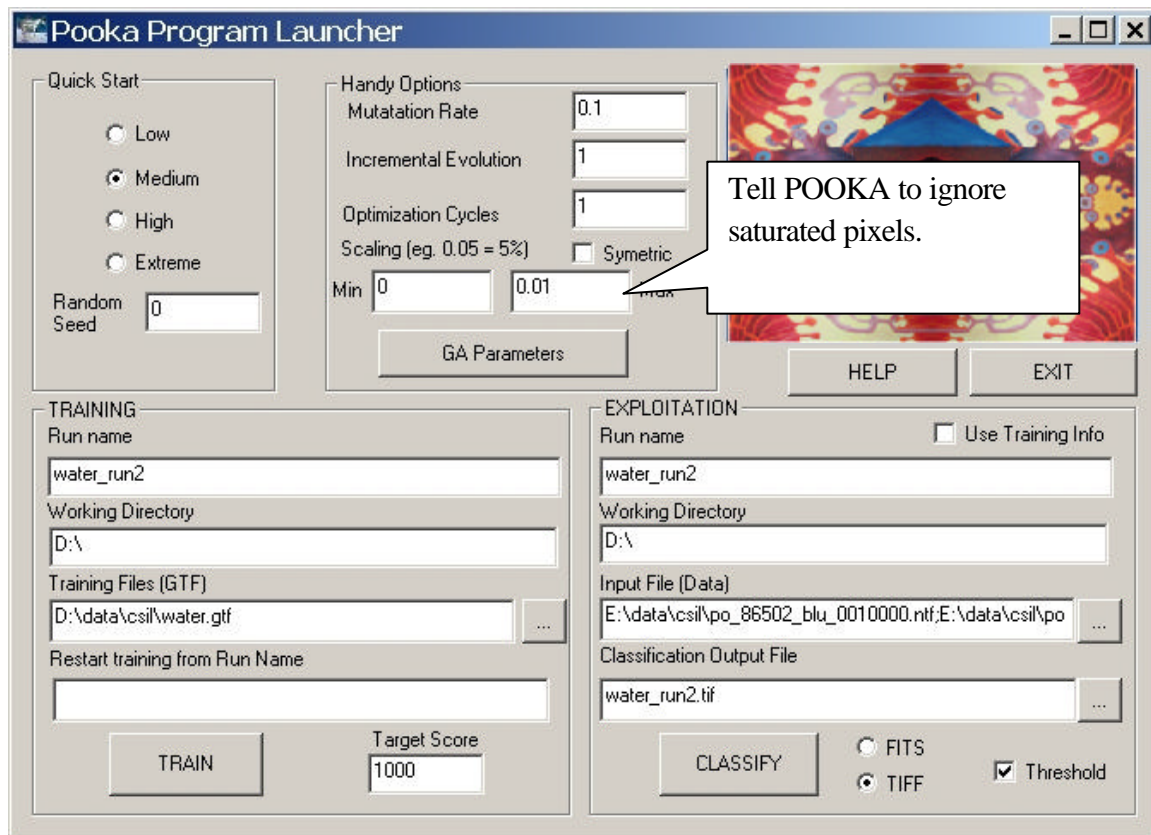
Restarting a training run.

After inspecting the output in Aladdin or ENVI you may want to add more training data / training files and restart from where you left off.



Scaling

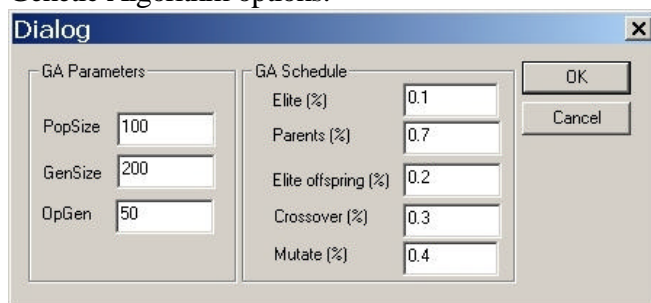
POOKA has a limited bit-width and therefore for some problems it is useful to scale the data differently. For example, the feature of interest may have pixel values between 50 and 300. There may be clouds in the image, which saturate the pixels and have a range 1500-2000. By default the scaling will be the minimum and maximum of the data range, and therefore POOKA will scale between 0 and 2000. This means you may lose pixel resolution for the feature. If you know you are not interested in the clouds, you can tell POOKA to ignore the high pixel values. In the image on the next page, we set the Max range value at 0.01. This means POOKA will ignore the top 1% of the image histogram, this will produce a range between 0 and 1000 (for example), which may lead to better performance.



Note, at the start of training, POOKA will report 3 ranges. The Truth range: this is the range of pixels for the feature you specified. The Data range: the range of all the data. The Histogram Range: The range that POOKA will use. By default this is the Data range (0 and 0 for Min and Max scaling). These numbers can give you some indication of whether you need to adjust the scaling.

GA Parameters

By pressing the **GA Parameters** button, you will see another dialog box with the detailed Genetic Algorithm options:



You may notice that these parameters will change as you select the **Effort Level** in the main window.